

CLAIM AMENDMENTS

IN THE CLAIMS:

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Currently Amended) A suture strand suitable for use as a suture or ligature, comprising:

a core including a plurality of core fibers made of a first material wherein the first material is a high molecular weight, high tenacity material, and wherein the core comprises:

a sub-core, the sub-core comprising a plurality of core fibers and arranged in a twisted bundle;

an outer ring comprising a plurality of core fibers surrounding the sub-core and arranged to form a woven annular braid; and

a cover surrounding the core, the cover including a plurality of cover fibers made of a second material different than the first material, and wherein the second material is a polymeric material selected from the group consisting of PET, polyester, coated urethanes, and mixtures thereof.

2. (Withdrawn) A suture strand according to claim 1, wherein the core fibers are arranged in a twisted bundle.

3. (Original) A suture strand according to claim 1, wherein the core consists solely of core fibers of the first material.

4. (Original) A suture strand according to claim 1, wherein the plurality of cover fibers are arranged to form a woven annular braid.

5. (Original) A suture strand according to claim 1, wherein the cover consists solely of cover fibers of the second material.

6. (Original) A suture strand according to claim 1, wherein the first material comprises a high tensile strength material.

7. (Cancelled)

8. (Original) A suture strand according to claim 1, wherein the first material is ultrahigh molecular weight long chain polyethylene.

9. (Cancelled)

10. (Original) A suture strand according to claim 1, wherein the second material is substantially opaque.

11. (Original) A suture strand according to claim 1, wherein the first material is substantially transparent.

12. (Original) A suture strand according to claim 1, wherein each of the core fibers comprises a bundle of filaments of the first material.

13. (Original) A suture strand according to claim 1, wherein each of the cover fibers comprises a bundle of filaments of the second material.

14. (Original) A suture strand according to claim 1, wherein each of the core fibers is substantially circular in cross section.

15. (Withdrawn) A suture strand according to claim 1, wherein each of the core fibers is substantially wedge-shaped in cross-section.

16-19. (Cancelled)

20. (Original) A suture strand according to claim 14, wherein:
each of the cover fibers is substantially circular in cross-section and has a first diameter;
and
each of the core fibers has a diameter greater than the first diameter.

21. (Withdrawn) A suture strand according to claim 15, wherein:
each of the cover fibers is substantially circular in cross-section and has a first diameter;
and
each of the core fibers has a length greater than the first diameter.

22. (Original) A suture strand according to claim 1, wherein:
each of the cover fibers comprises a bundle of cover filaments, each cover filament having a substantially circular cross-section and a cover filament diameter; and
each of the core fibers comprises a bundle of core filaments, each core filament having a substantially circular cross-section and a core filament diameter, wherein the core filament diameter of each of the core filaments is greater than the cover filament diameter of any of the cover filaments.

23. (Currently Amended) A suture strand suitable for use as a suture or ligature,
comprising:

a core including a plurality of core fibers consisting solely of a first high strength material, and wherein the core comprises:

_____ a sub-core, the sub-core comprising a first plurality of core fibers and arranged in a twisted bundle; and

_____ an outer ring comprising a second plurality of core fibers surrounding the sub-core and arranged to form a woven annular braid; and

a cover surrounding the core, the cover including a plurality of cover fibers consisting solely of a second material different than the first material and wherein said second material is a material having good knot-tying ability and wherein said first material is a material having high tenacity and a greater tensile strength than said second material.

24. (Original) A suture strand according to claim 23, wherein the first material comprises a high tensile strength material.

25. (Original) A suture strand according to claim 23, wherein the first material is a high molecular weight, high tenacity material.

26. (Original) A suture strand according to claim 23, wherein the first material is ultrahigh molecular weight long chain polyethylene.

27. (Original) A suture strand according to claim 23, wherein the second material is a polymeric material selected from the group consisting of PET, polyester, coated urethanes, and mixtures thereof.

28. (Original) A suture strand according to claim 23, wherein the second material is substantially opaque.

29. (Original) A suture strand according to claim 23, wherein the first material is substantially transparent.

30-33. (Cancelled)

34. (Previously Presented) A suture strand according to claim 23, wherein the second material has a lower coefficient of friction than said first material.

35. (Previously Presented) A suture strand according to claim 1, wherein the second material has a lower coefficient of friction than said first material.

36. (New) A suture strand according to claim 23, wherein the cover is arranged in a loosely woven annular braid, each cover fiber is substantially circular in cross-section and has a

diameter, and each cover fiber is spaced from an adjacent cover fiber a center-to-center distance of at least twice the cover fiber diameter.

37. (New) A suture strand according to claim 23, wherein:

each of the first plurality of core fibers is substantially circular in cross-section and has a first diameter;

each of the second plurality of core fibers is substantially circular in cross-section and has a second diameter smaller than the first diameter; and

each of the cover fibers is substantially circular in cross-section and has a third diameter smaller than the second diameter.

38. (New) A suture strand according to claim 23, wherein:

each of the first plurality of core fibers comprises a bundle of first core filaments of the first material, each first core filament having a substantially circular cross-section and a first filament diameter;

each of the second plurality of core fibers comprises a bundle of second core filaments of the first material, each second core filament having a substantially circular cross-section and a second filament diameter smaller than the first filament diameter; and

each of the cover fibers comprises a bundle of cover filaments of the second material, each cover filament having a substantially circular cross-section and a third filament diameter smaller than the second filament diameter.